

Work Order ID 160089

Thursday, April 20, 2017 3:23:51 PM

646.3210
B160089
REV N/C

160089

Page 1

Item ID: 646.3210

Revision ID:

Item Name: Support

Start Date: 4/21/2017 Start Qty: 6.00

Required Date: 5/25/2017 Req'd Qty: 6.00

Reference: (P.A.)SCHEDULED/S

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Customer:

Approvals: Process Plan: 21 Date: APR 21 2017

QC: 9-89 Date: Tooling: Date:

SPC (Y/N): Date:

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
646.3200	n/c

100 0.00

100

BAND SAW

Bandsaw

Memo

0.22

Jeaspa Bandsaw

Cut Blank at 10.35"

6 0 MK 2017-05-18
my

110

110

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

1.24

3.58

HAAS CNC vertical machine #1

1-Machine per folio FB146
DWG REV: N/C
FOLIO REV: AA

6 0 KT 2017-05-24
DAS 17-05-25
9-89
A.A

2- deburr and break all sharp edges

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Work Order ID 160089

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Page 2

Item ID: 646.3210

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Support

Start Date: 4/21/2017 Start Qty: 6.00

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Cust Item ID:

Required Date: 5/25/2017 Req'd Qty: 6.00

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Customer:

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo	0.00 0.06				6	6		DAS 20 17-05-24 9-89
130 *130* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.12				6	6		DAS 14 9-89 17/05/29
140 *140* Outsource4 Outsource process - Anodize	Outsource process-Anodize per QSI017 4.1.10.1 Memo Issue P/O to ATG : <u>36731</u> 1- Black Anodize as per Dwg 646.3200 2- PRIME AS PER DWG, SEE NOTE #2 Certification of Comformity is required	0.00 432.00				6		JUN 16 2017	DAS 13 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Work Order ID 160089

Thursday, April 20, 2017 3:23:51 PM

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Page 3

Item ID: 646.3210

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Support

Start Date: 4/21/2017 Start Qty: 6.00

6

Cust Item ID:

Required Date: 5/25/2017 Req'd Qty: 6.00

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Reference: (P.A.)SCHEDULED/S

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Receive & Inspect for Damage & Mat'l Certs	0.00							
150									
Packaging	Memo	0.12							
Packaging									
155	QC5- Inspect part completeness to step on W/O	0.00							
155									
QC	Memo	0.12							
Quality Control	2.5 mils thickness primer								
180	Identify as per dwg & Stock Location: <u>CCT020</u>	0.00							
180									
Packaging	Memo	0.06							
Packaging	***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV***								

6x SP 17-7-25

Qe DAS
38
9-89
JUL 26 2017

Sp AS
6
39

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : ☐					

Work Order ID 160089

Thursday, April 20, 2017 3:23:51 PM

160089

Page 4

Item ID: 646.3210

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Support

Start Date: 4/21/2017 Start Qty: 6.00

6

Cust Item ID:

Required Date: 5/25/2017 Req'd Qty: 6.00

6

Customer:

Reference: (P.A.)SCHEDULED/S

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

190

QC21- Final Inspection - Work Order Release

0.00

190

QC

Memo

0.06

Quality Control

17/1/28

UN 7/27/17.

(Signature)

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																							
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Root Cause		FAULT CATEGORY																																																													
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	No Re-verification ☐	Operator ☐	Offset/Setup ☐	Supplier ☐	Training ☐	Use for Testing ☐	Poor Information ☐	Rushing ☐	Product Improvement ☐	Process Improvement ☐	Manufacturing Process ☐	Past Due ☐	Pressure/Forced ☐	Bending ☐	Centre Not Concentric ☐	Cracks ☐	Crimp/Kink/Ripple/Wave ☐	Cuffs ☐	Crushing ☐	Heat Treat ☐	Wave/Twist in Tube ☐	Marks/Chatter ☐	Temperature/Cure ☐	Set-up ☐	BOM/Route ☐	Broken/Damage/Defect ☐	Inspection Incomplete/Unqualified ☐	Contamination ☐	Countersink ☐	Cut Too Short ☐	Instructions Incomplete/Unclear ☐	Drill Holes ☐	Power Loss/Surge ☐	Folio/Program ☐	Grain ☐	Weld ☐	Wrong Stock Pulled ☐	Out of Sequence ☐	Off-set ☐	Mislabeled ☐	Fit/Function ☐	Misaligned/off center ☐	Positioned Wrong ☐	Outside Dimensions ☐	Over/Under tolerance ☐	Part Incorrect ☐	Part Lost/Missing ☐	Part Moved ☐	Drawing ☐	Finish ☐	Misread ☐	Turning Sequence ☐
																						OTHER : ☐																																									

Picklist Print

Thursday, April 20, 2017 3:23:50 PM

Page 1

Work Order ID: 160089

160089

Parent Item: 646.3210

646.3210

Parent Item Name: Support

Start Date: 4/21/2017

Required Date: 5/25/2017

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP REV:A NEW ISSUE 12-11-09 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M7075T6B6.000X1.000		Purchased		No		100	f	12.0416	0.862	5.444211			
M7075T6B6 000X1 000									**	5.44			
7075-T6 BAR 6.000" X 1.000"													

Location

Loc Qty

Loc Code

MAT

12.0416

M136103

0.75

M136899

2.0616

→ M137263

9.23

5.44

MK 2017-05-18

mf

Please see attach Pablo's E-mail
for material approved.

17.05.05

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

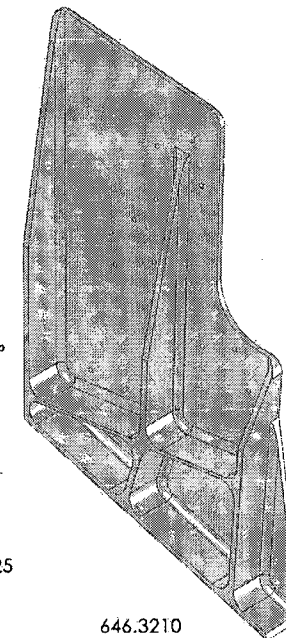
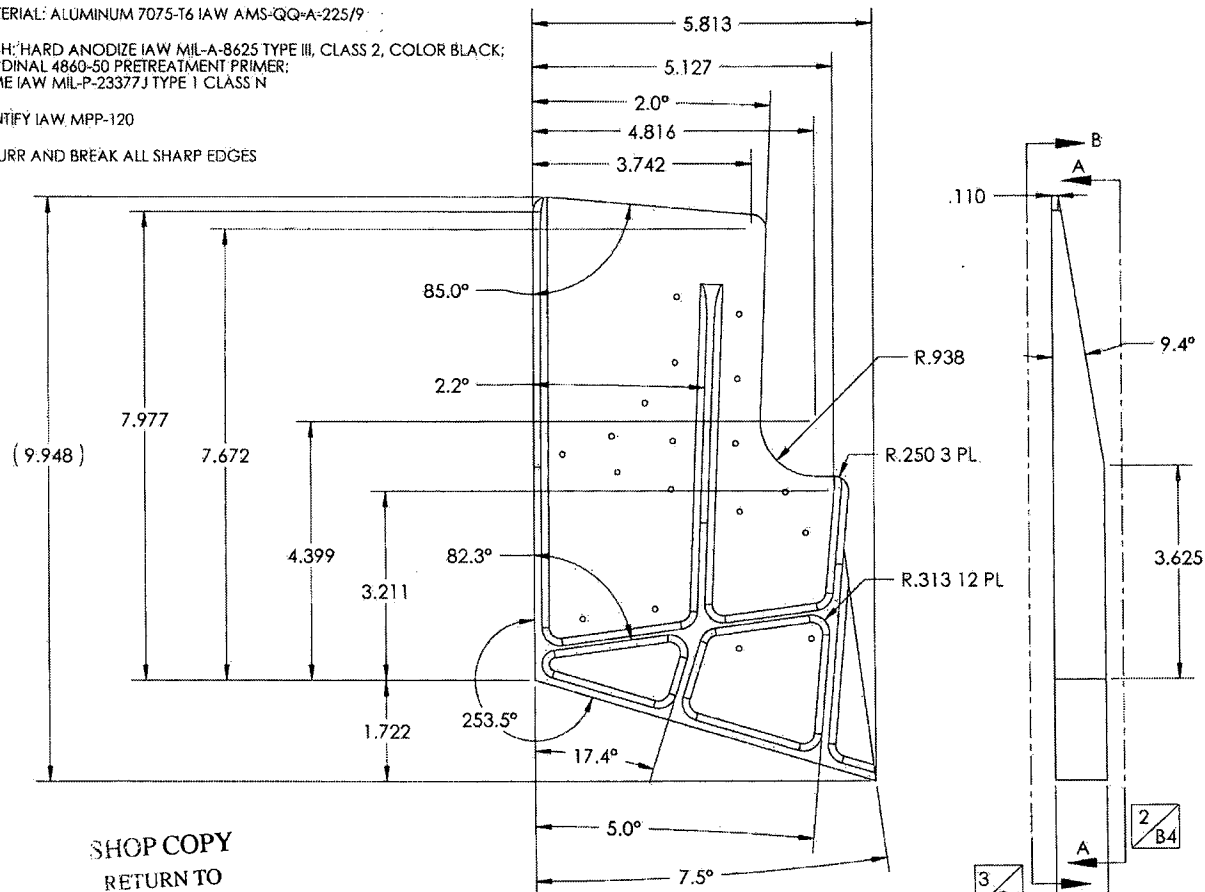
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : ☐						
Misidentified ☐	☐	Past Due ☐							

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NOTES:

1. MATERIAL: ALUMINUM 7075-T6 IAW AMS-QQ-A-225/9
2. FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK; CARDINAL 4860-50 PRETREATMENT PRIMER; PRIME IAW MIL-P-23377 TYPE I CLASS N
3. IDENTIFY IAW MPP-120
4. DEBURR AND BREAK ALL SHARP EDGES



646.3210

SHOP COPY
RETURN TO
ENGINEERING
(UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 160089 MJS
170421

REV.	DESCRIPTION	DATE	APPROVED

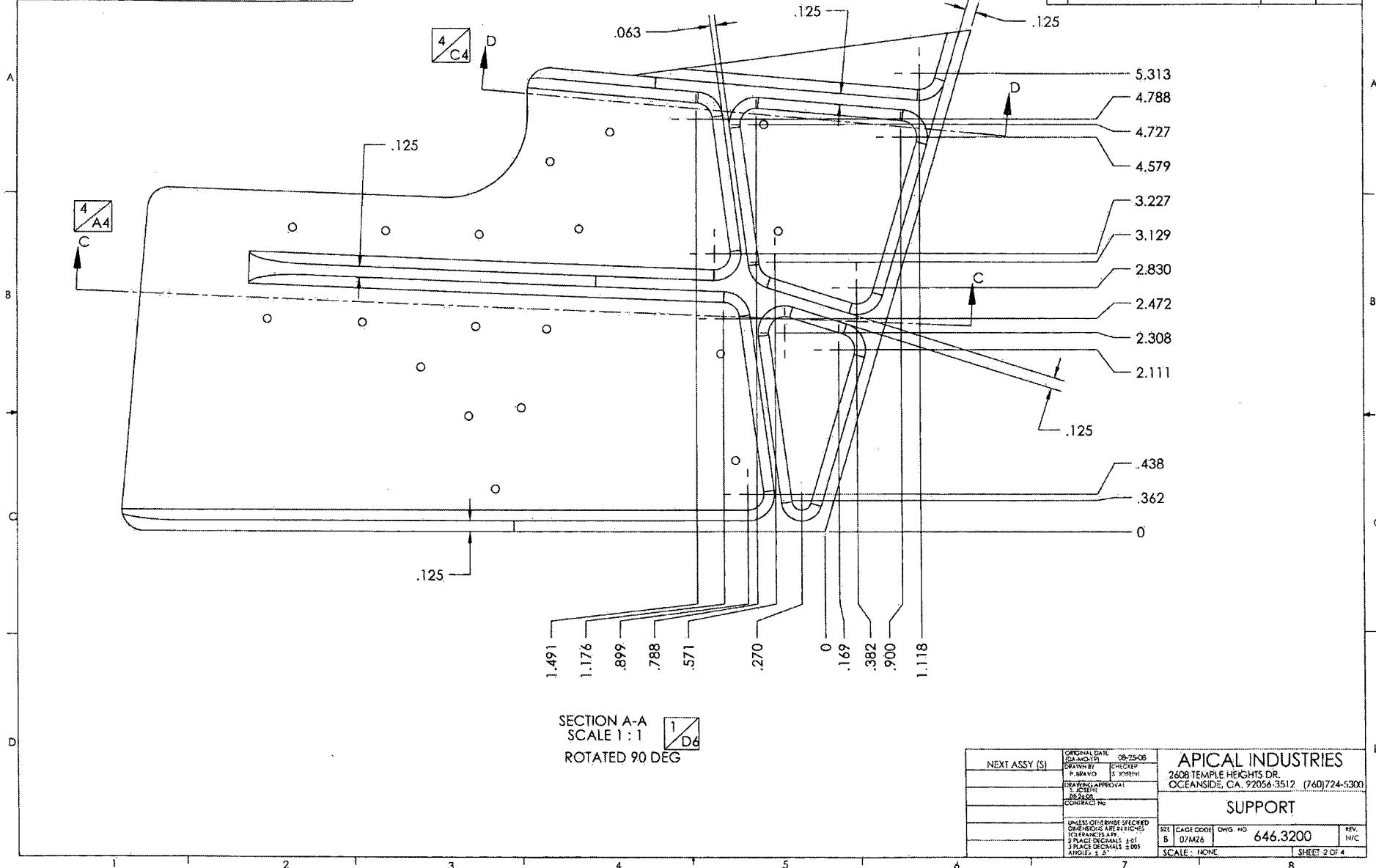
QTY	646.4000	ORIGINAL DATE 10-25-09	DESIGNER P. BRAY	DATE 10-25-09	APPROVED S. JOSEPH
NEXT ASSY (S)		CONTRACT NO.			
		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ±.01 ANGLES ±.5°			

646.3210	SUPPORT	DESCRIPTION	MAT'L	SPEC.

APICAL INDUSTRIES	2608 TEMPLE HEIGHTS DR.	OCEANSIDE, CA. 92056-3512	(760)724-5300
SUPPORT			
SIZE	CAGE CODE	DWG NO.	REV.
B	07M26	646.3200	N/C
SCALE: NONE			

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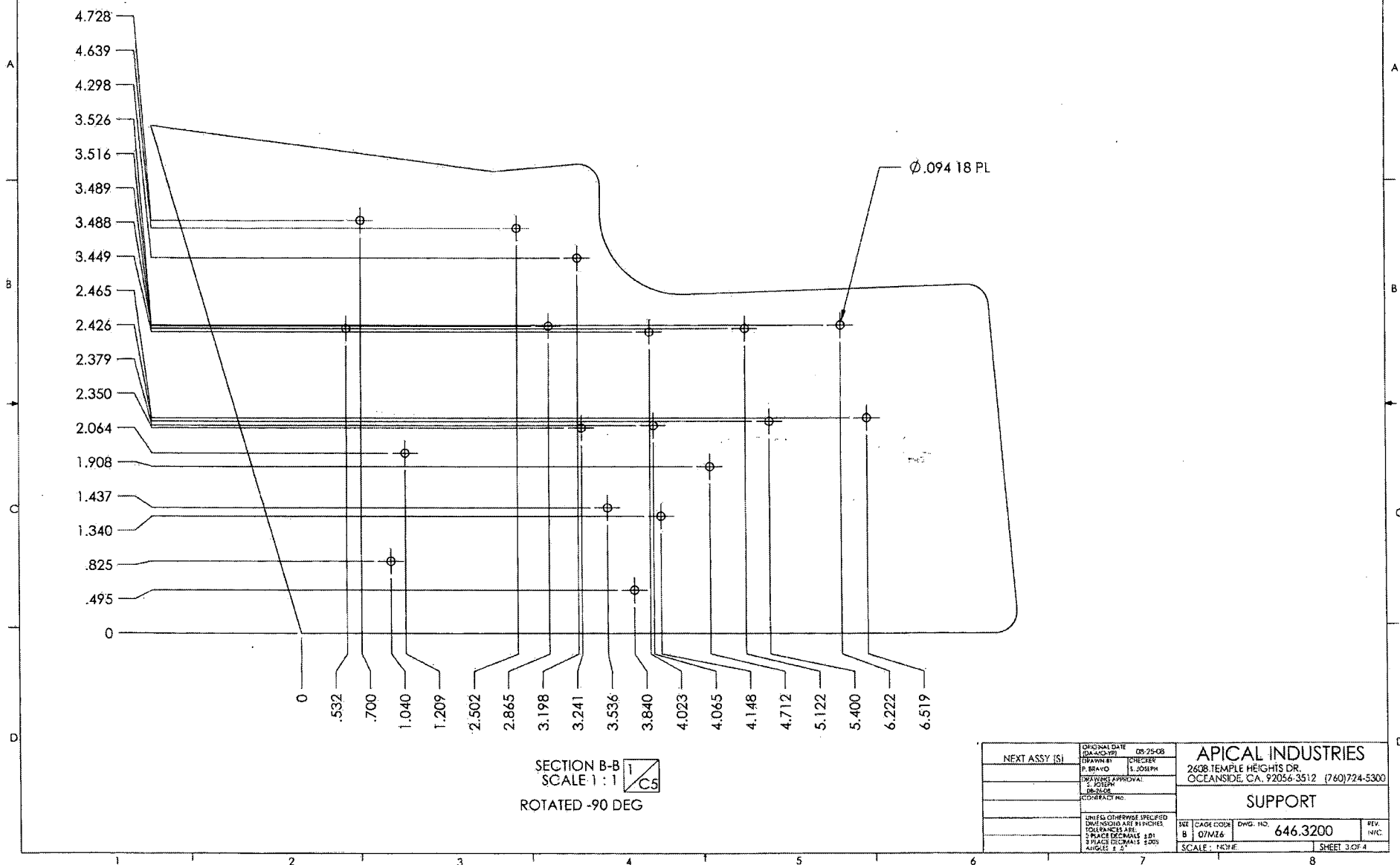
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



NEXT ASSY (S)	ORIGINAL DATE 08-25-06	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
	DESIGNED BY P. BRAVO		
	CHECKED BY S. JOHNSON	SUPPORT	
	DRAWN BY T. JOHNSON		
	APPROVED BY 08-24-06	SCALE: NONE	
	CONTRACT NO.		
	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS ARE 16THS DECIMALS ARE 10THS ANGLES 2.5°	SHEET 2 OF 4	REV. N/C

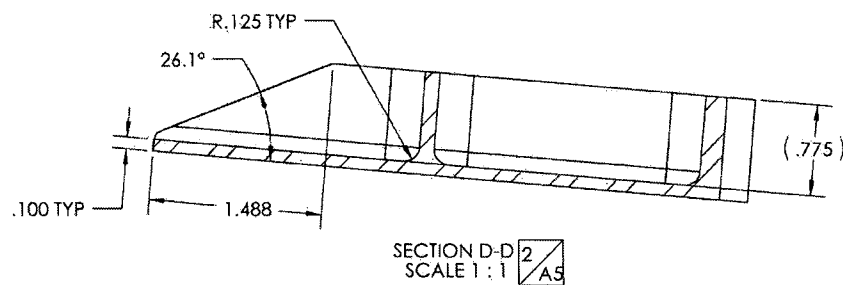
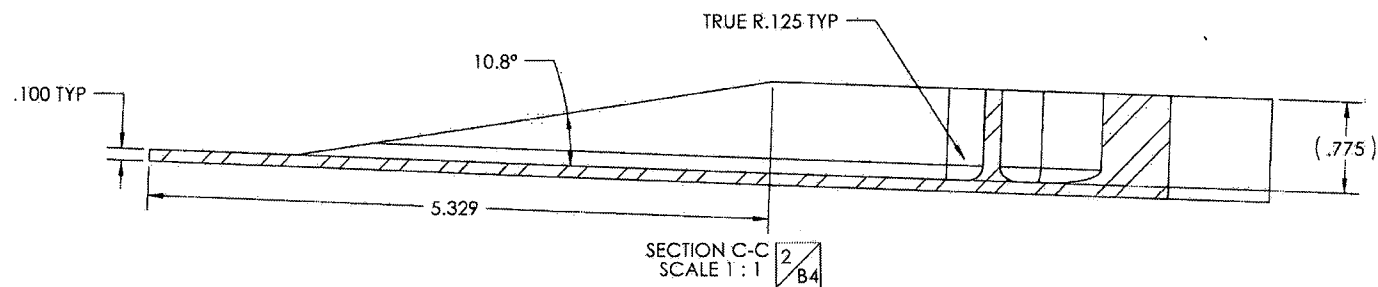
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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



NEXT ASSY (S)	ORIGINAL DATE 10A-MO-YR	08-25-08	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
	DRAWN BY	P. BRAVO		
	CHECKED BY	J. JOSEPH		
	DRAWING APPROVAL			
	CONTRACT NO.		SUPPORT	
	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SRE CAGE CODE B 07M26	DWG. NO. 646.3200
			SCALE: NONE	REV. N/C
				SHEET 4 OF 4

David Duval

From: Chantal Lavoie
Sent: May-05-17 1:53 PM
To: David Duval
Subject: FW: 17814
Attachments: M7075T6B-RevB.pdf; 646.3000 NC1 Lower Cutter Assy [ECN 02195].pdf; D4842-RevB.pdf

From: Chantal Lavoie
Sent: Tuesday, May 02, 2017 11:57 AM
To: 'Eric Downing' <edowning@dartaero.com>
Subject: FW: 17814

Hi Eric,
Check this e-mail, for 7075-t6 bar or cut from plate.
Thanks
Chantal

From: Chantal Lavoie
Sent: Tuesday, May 10, 2016 1:20 PM
To: Chris Provencal <cprovencal@dartaero.com>
Cc: 'Eric Downing' <edowning@dartaero.com>; Linda Lacelle <llacelle@dartaero.com>; Patrick Smith <psmith@dartaero.com>
Subject: FW: 17814

Hi Chris,
I found another problem when ordering material, see attached for mill spec's 7075-T6.
Material spec's call out 7075-T6/T651 etc..... But with no indication of AMS or QQ-A accepting T651.
Please advise if you can sign deviation would need to order some material.

Note: this material is used for cable cutter part if you look at dwg from Apical (646.3000) they call out 7075-T651 under AMS-QQ-A-250/12, see attached for dwg files.

Dart dwg (D4842) only call out 7075-t6 see attached for dwg files. 95% of 7075-T6 material will be under 7075-T651/AMS-QQ-A-250/12.

Thanks
Chantal

From: Linda Lacelle
Sent: Tuesday, May 10, 2016 1:02 PM
To: Chantal Lavoie <clavoie@dartaero.com>
Subject: FW: 17814

From: Pablo Bravo [<mailto:pbravo@apicalindustries.com>]
Sent: Friday, September 21, 2012 11:08 AM
To: 'Jean-Luc Menard' <jmenard@dartaero.com>; 'Linda Lacelle' <llacelle@dartaero.com>; 'David Shepherd' <dshepherd@dartaero.com>; 'Mike Petsche' <mpetsche@dartaero.com>
Cc: 'Isam El-Kassis' <ielkassis@dartaero.com>; 'Chantal' <clavoie@dartaero.com>; 'Bill Beckett' <bbeckett@dartaero.com>; 'Steve Joseph' <sjoseph@apicalindustries.com>
Subject: RE: 17814

After looking at this more closely, we should be able to use the AMS-QQ-A-250/12 that was originally quoted. No objection on this side to the material change. Let me know what documentation you need to make this happen.

Thanks,

Pablo

From: Jean-Luc Menard [<mailto:jmenard@dartaero.com>]
Sent: Friday, September 14, 2012 5:30 AM
To: 'Linda Lacelle'; 'David Shepherd'; 'Mike Petsche'
Cc: 'Isam El-Kassis'; 'Chantal'; 'Bill Beckett'; 'Pablo Bravo'; 'Steve Joseph'
Subject: RE: 17814

THE 1.250" x 2.00 " would be used on the rail 647.0200.
JL

From: Linda Lacelle [<mailto:llacelle@dartaero.com>]
Sent: Friday, September 14, 2012 7:59 AM
To: 'David Shepherd'; 'Mike Petsche'
Cc: 'Isam El-Kassis'; 'JEANLUC MENARD'; 'Chantal'; 'Bill Beckett'; 'Pablo Bravo'; 'Steve Joseph'
Subject: RE: 17814

JL will get the info on what part it is used in, as the boms are not made yet.
LL

From: David Shepherd [<mailto:dshepherd@dartaero.com>]
Sent: September-14-12 8:12 AM
To: 'Linda Lacelle'; 'Mike Petsche'
Cc: 'Isam El-Kassis'; 'JEANLUC MENARD'; 'Chantal'; 'Bill Beckett'; 'Pablo Bravo'; 'Steve Joseph'
Subject: RE: 17814

Linda,

My understanding is that Pablo Bravo will have to make ALL MRB decisions on the cable cutters since Apical owns the STC.

Therefore, you will need to send an email to Pablo to get a disposition on these types of issues.
What Apical p/n is this for?

PB,

Is the material substitution requested below acceptable?

If not, can you provide guidance on where you were purchasing this material so that Dart purchasing can track it down.

David

From: Linda Lacelle [<mailto:llacelle@dartaero.com>]
Sent: September-13-12 10:23 AM
To: 'Mike Petsche'
Cc: dshepherd@dartaero.com; 'Isam El-Kassis'; 'JEANLUC MENARD'; 'Chantal'
Subject: RE: 17814

Ok,so where do we go from here?

From: Mike Petsche [<mailto:mpetsche@dartaero.com>]
Sent: September-13-12 11:51 AM
To: Linda Lacelle
Cc: <dshepherd@dartaero.com>; Isam El-Kassis; JEANLUC MENARD; Chantal
Subject: Re: 17814

Cable cutters are largely outside of engineering. We are only manufacturing for apical. Using all apical data.

Sent from my iPhone

On 2012-09-13, at 11:40 AM, "Linda Lacelle" <llacelle@dartaero.com> wrote:

Any news on this pls?

From: Linda Lacelle [<mailto:llacelle@dartaero.com>]
Sent: September-11-12 12:57 PM
To: dshepherd@dartaero.com; 'Mike Petsche' (mpetsche@dartaero.com)
Cc: Isam El-Kassis (ielkassis@dartaero.com); JEANLUC MENARD (jmenard@dartaero.com)
Subject: FW: 17814
Importance: High

This is the mat'l for the cable cutters. All 7075 this big is cut from plate. So where do we go from here?

LL

From: Marc Bellavance [<mailto:mbellavance@dartaero.com>]
Sent: September-11-12 12:19 PM
To: 'Chantal Lavoie'
Cc: 'Lacelle, Linda'
Subject: RE: 17814

Chantal,

The mechanical properties of a 1.250" thick plate under AMS-QQ-A-250/11 are below the mechanical properties of a 1.250" thick bar under AMS-QQ-A-225/9 and AMS-QQ-A-200/11 so we can't accept to substitute as proposed below.

Marc Bellavance
Technical/Shop Support
T. 613-632-5200 | C. 613-
676-0992 | F. 613-632-
9311

1270 Aberdeen Street,
Hawkesbury, Ontario,
Canada, K6A 2K7

Product Documentation:
Verify Revision
Status/Download [HERE!](#)

<image001.jpg>

<image002.png> <image003.png> <image004.png> <image005.png>

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Please consider your environmental responsibility before printing this e-mail.

From: Chantal Lavoie [<mailto:clavoie@dartaero.com>]
Sent: Monday, September 10, 2012 2:39 PM
To: Marc Bellavance
Cc: Lacelle, Linda
Subject: FW: 17814

Hi Marc,
Please see attached for p/o:17814, material line 5 and 7 is spec's QQ-A-250-12 acceptable.
Thanks
Chantal

From: Ivers, Stan [<mailto:Stan.Ivers@thyssenkrupp.com>]
Sent: September 10, 2012 1:41 PM
To: 'Chantal Lavoie'
Subject: RE: 17814

Items 5-7 QQ-A- 250-12 is what was quoted please advise will order items 2-4

Thank you

Regards

Stan Ivers
Inside Sales Rep
ThyssenKrupp material NA
905-532-1350
30shi@tkmna.com

From: Chantal Lavoie [<mailto:clavoie@dartaero.com>]
Sent: Monday, September 10, 2012 12:31 PM
To: Ivers, Stan
Subject: RE: 17814

Sorry Stan,
I add send you this order last week please order.
Thanks
Chantal

From: Ivers, Stan [<mailto:Stan.Ivers@thyssenkrupp.com>]
Sent: September 10, 2012 8:07 AM
To: 'Chantal Lavoie'
Subject: 17814

Good morning Chantal

Please advise status on this p.o as nothing is on order and will miss delivery dates

Thanks

Regards

Stan Ivers
Inside Sales Rep
ThyssenKrupp material NA
905-532-1350
30shi@tkmna.com



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO36731

Purchase Order Date 6/16/2017

PO Print Date 6/28/2017

Page Number 9 of 16

Order From :

VC-ATG001

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE ROAD
ROCKLAND, ON K4K 1T2
CANADA

Contact Name

Vendor Phone 613-446-4544

Ship To Contact

Ship To Phone

Ship Via: VENDOR'S TRUCK

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

20	162406	646.2910 DEFLECTOR REV. N/C	7/21/2017	6.00	\$48.00	\$288.00
			Yes			
			7/21/2017			

AS PER MPP-172 SECTION 2.1,
HARD ANODIZE COLOR BLACK, PER IAW MIL-A-8625 TYPE 3 CLASS 2
AS PER MPP-172 SECTION 4.2,
PRIME AS PER IAW MIL-PRF-23377 TYPE 1 CLASS N

Line Total: \$288.00

21	160089	646.3210 SUPPORT REV. / N/C	7/21/2017	6.00	\$14.35	\$86.10
			Yes			
			7/21/2017			

AS PER MPP-172 SECTION 2.1,
HARD ANODIZE COLOR BLACK, PER IAW MIL-A-8625 TYPE 3 CLASS 2
AS PER MPP-172 SECTION 4.2,
PRIME AS PER IAW MIL-PRF-23377 TYPE 1 CLASS N

Line Total: \$86.10

PO Instructions: PRIMER IS SUPPLIED BY DART

Note:

6/28/2017

8017-7-25.



A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 913567

Date: 21-Jul-17

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Chantal Lavoie
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
Quantity	Description		
	Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us.		
6 ea	Part: 646.3210 Support Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 21244		Rev: N/C PO: PO36731 Line: 21
12 ea	Part: 646.3717. Doubler Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 21246		Rev: A PO: PO36731 Line: 23
6 ea	Part: 646.3813 Strut Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 21250		Rev: N/C PO: PO36731 Line: 27
6 ea	Part: 647.0113 Strut Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 21253		Rev: A PO: PO36731 Line: 30
5 ea	Part: 647.0210 Rail Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0001-.0002" (1		Rev: N/C
Made in Canada.			